

Title (en)
Elastic surface wave filter device

Title (de)
Filteranordnung mit elastischen Oberflächenwellen

Title (fr)
Dispositif de filtrage à ondes élastiques de surface

Publication
EP 0836278 A2 19980415 (EN)

Application
EP 97117419 A 19971008

Priority
JP 26839796 A 19961009

Abstract (en)
Disclosed is an elastic surface wave filter device which can realize balanced operation with a neutral terminal kept at a ground potential, and is adaptable for any system of unbalanced input - balanced output or balanced input - unbalanced output even with an input and an output being different in characteristic impedance from each other. An elastic surface wave filter (3b) having a predetermined phase is cascaded to an elastic surface wave filter (4) having a phase different about 180 degrees from the predetermined phase to form a first set of cascaded elastic surface wave filters. An elastic surface wave filter (3a) having the predetermined phase is cascaded to an elastic surface wave filter (3c) having the predetermined phase to form a second set of cascaded elastic surface wave filters. One of input/output terminals of the first set of cascaded elastic surface wave filters and one of input/output terminals of the second set of cascaded elastic surface wave filters are electrically connected in parallel to an unbalanced input/output terminal (6). The other input/output terminal of the first set of cascaded elastic surface wave filters and the other input/output terminal of the second set of cascaded elastic surface wave filters are electrically connected in series to balanced input/output terminals (9a, 9b).

IPC 1-7
H03H 9/64

IPC 8 full level
H03H 9/145 (2006.01); **H03H 9/00** (2006.01); **H03H 9/25** (2006.01); **H03H 9/64** (2006.01)

CPC (source: EP KR US)
H03H 9/0028 (2013.01 - EP US); **H03H 9/42** (2013.01 - KR)

Cited by
DE10343296B4; DE10234685A1; EP1244212A3; EP2372910A1; US6791437B2; EP0961404A3; US6667673B1; EP1251638A3; EP1249933A3; US6998760B2; US6388545B1; US7199684B2

Designated contracting state (EPC)
DE FI FR GB SE

DOCDB simple family (publication)
EP 0836278 A2 19980415; **EP 0836278 A3 20000223**; **EP 0836278 B1 20020724**; DE 69714178 D1 20020829; DE 69714178 T2 20021114; JP 3186604 B2 20010711; JP H10117123 A 19980506; KR 100275260 B1 20001215; KR 19980032698 A 19980725; US 5994980 A 19991130

DOCDB simple family (application)
EP 97117419 A 19971008; DE 69714178 T 19971008; JP 26839796 A 19961009; KR 19970051822 A 19971009; US 94626597 A 19971007